

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

 ATTORNEY'S DKT NO.
033072-022

 APPLICATION NO.
10/054,616

 APPLICANT
Larry S. Barak, et al.

 FILING DATE
January 22, 2002

 GROUP
1645

U.S. PATENT DOCUMENTS

Examiner Initials	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication (MM-DD-YYYY)
	Number	Kind Code (if known)		
MDP	6,150,393		Behan, et al.	11-21-2000
↑	6,140,509		Behan, et al.	10-31-2000
	6,110,693		Barak, et al.	08-29-2000
	6,107,324		Behan, et al.	08-22-2000
	6,066,476		Tsien, et al.	05-23-2000
	5,891,646		Barak, et al.	04-06-1999
	5,777,079		Tsien, et al.	07-07-1998
	5,767,337		Roses, et al.	06-16-1998
	5,719,262		Buchardt, et al.	02-17-1998
	5,714,331		Buchardt, et al.	02-03-1998
	5,665,710		Rahman, et al.	09-09-1997
↓	5,625,048		Tsien, et al.	04-29-1997
MDP	5,602,240		De Mesmaeker, et al.	02-11-1997

FOREIGN PATENT DOCUMENTS

Examiner Initials	Foreign Patent Document		Country	Date of Publication (MM-DD-YYYY)	Translation	
	Number	Kind Code (if known)			Yes	no
MDP	WO 00/12704	A2	PCT	03-09-2000		
↑	WO 96/40062	A1	PCT	12-19-1996		
↓	WO 94/26764	A1	PCT	11-24-1994	✓ checked	
MDP	WO 93/24510	A1	PCT	12-09-1993	✓ checked	

NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Include name of author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book; magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		
MDP	ANGERS, S., et al., <i>Detection of β_2-Adrenergic receptor dimerization in living cells using bioluminescence resonance energy transfer (BRET)</i> , <u>Proceedings of the National Academy of Sciences</u> , Vol 97, No. 7, March 28, 2000, pp. 3684-3689, Proc.Natl. Acad. Sci, USA.		
↑	ATTRAMADAL, H., et al., <i>β-Arrestin2, a Novel Member of the Arrestin/ β-Arrestin Gene Family</i> , <i>Journal of Biological Chemistry</i> , Vol 257, No. 25, September 5, 1992, pp 17882-17890, The American Society for Biochemistry and Molecular Biology, Inc., USA.		
	BARAK, L.S., et al., <i>A β-Arrestin/Green Fluorescent Protein Biosensor for Detecting G Protein-coupled Receptor Activation</i> , <i>Journal of Biological Chemistry</i> , Vol. 272, No. 44, October 31, 1997, pp. 27497-27500, The American Society for Biochemistry and Molecular Biology, Inc., USA.		
↓	BARAK, L.S., et al., <i>Constitutive arrestin-mediated desensitization of a human vasopressin receptor mutant associated with nephrogenic diabetes insipidus</i> , <u>Proceedings of the National Academy of Sciences</u> , Vol 98, No. 1, January 2, 2001, pp. 93-98, Proc.Natl. Acad. Sci, USA.		
MDP	BARAK, L.S., et al., <i>Internal Trafficking and Surface Mobility of a Functionally Intact β_2-Adrenergic Receptor-Green Fluorescent Protein Conjugate</i> , <u>Molecular Pharmacology</u> , 51, 1997, pp. 177-184.		
Examiner Signature	MICHAEL PAK	Date Considered	8/15/05

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. SEND TO: Assistant Commissioner for Patents, Washington, D.C. 20231.

Substitute for form 1449A/PTO

ATTORNEY'S DKT NO.

APPLICATION NO.

033072-022

10/054,616

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

APPLICANT

Larry S. Barak, et al.

FILING DATE

January 22, 2002

GROUP

1645

JUL 19 2002

RECEIVED

JUL 23 2002

U.S. PATENT DOCUMENTS

Examiner Initials	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication (MM-DD-YYYY)
	Number	Kind Code (if known)		
MDP ↑	5,569,827		Kessous-Elbaz, et al.	10-29-1996
	5,569,824		Donahower, et al.	10-29-1996
	5,539,082		Nielsen, et al.	07-23-1996
	5,264,221		Tagawa, et al.	11-23-1993
	5,034,506		Summerton, et al.	07-23-1991
	4,816,567		Cabilly, et al.	03-28-1989
	4,816,397		Boss, et al.	03-28-1989
	4,493,795		Nestor, Jr., et al.	01-15-1985
MDP ↓	4,342,566		Theofilopoulos, et al.	08-03-1982

NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Include name of author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		
MDP ↑	BARAK, L.S., et al., <i>Real-time Visualization of the Cellular Redistribution of G Protein-coupled Receptor Kinase 2 and β-arrestin 2 during Homologous Desensitization of the Substance P Receptor</i> , <u>Journal of Biological Chemistry</u> , Vol. 274, No. 11, March 12, 1999, pp. 7565-7569, The American Society for Biochemistry and Molecular Biology, Inc., USA.		
	<u>Current Protocols in Molecular Biology</u> , Vol. 1, Section II, Supplement 24, 6.3.1-6.3.6, 1993, John Wiley & Sons, NY.		
	DREWS, J., <i>Drug Discovery: A Historical Perspective</i> , <u>Science</u> , Vol. 287, March 17, 2000, pp. 1960-1964, American Association for the Advancement of Science, Washington, D.C.		
	FERGUSON, S.S.G., et al., <i>G-protein-coupled receptor regulation: role of G-protein-coupled receptor kinases and arrestins</i> , <u>Can. J. Physiol. Pharmacol.</u> , Vol. 74, 1996, pp. 1095-1110, NRC, Canada.		
	FERGUSON, S.S.G., et al., <i>Role of Phosphorylation in Agonist-promoted β_2-Adrenergic Receptor Sequestration</i> , <u>Journal of Biological Chemistry</u> , Vol 270, No. 42, October 20, 1995, pp. 24782-24789, The American Society for Biochemistry and Molecular Biology, Inc., USA.		
	HARADA, A., et al., <i>Altered microtubule organization in small-calibre axons of mice lacking tau protein</i> , <u>Nature</u> , Vol. 369, No. 6480, June 9, 1994, Macmillan Magazines, Ltd., London.		
	KIM, K.-M., et al., <i>Differential Regulation of the Dopamine D₂ and D₃ Receptors by G Protein-coupled Receptor Kinases and β-arrestins</i> , <u>Journal of Biological Chemistry</u> , Vol 276 No. 40, October 5, 2001, pp. 37409-37414, The American Society for Biochemistry and Molecular Biology, Inc., USA.		
	LAPORTE, S.A., et al., <i>The β_2-Adrenergic Receptor/β-arrestin complex recruits the clathrin adaptor AP-2 during endocytosis</i> , <u>Proceedings of the National Academy of Sciences</u> , Vol 96, No. 7, March 30, 1999, pp. 3712-3717, Proc. Natl. Acad. Sci. USA.		
MDP ↓	LAPORTE, S. A., et al., <i>The Interaction of β-Arrestin with the AP-2 Adaptor Is Required for the Clustering of β_2-Adrenergic Receptor into Clathrin-coated Pits</i> , <u>Journal of Biological Chemistry</u> , Vol 275, No. 30, July 28, 2000, pp. 23120-23126, The American Society for Biochemistry and Molecular Biology, Inc., USA.		
	LOHSE, M., et al., <i>β-Arrestin: A Protein That Regulates β-Adrenergic Receptor Function</i> , <u>Science</u> , Vol. 248, pp. 1547-1550, June 22, 1990.		
Examiner Signature	MICHAEL PIATK		Date Considered 8/15/05

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. SEND TO: Assistant Commissioner for Patents, Washington, D.C. 20231.

Substitute for form 1449A/PTO

ATTORNEY'S DKT NO.
033072-022APPLICATION NO.
10/054,616INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

APPLICANT

Larry S. Barak, et al.

FILING DATE

January 22, 2002

GROUP

1645

JUL 19 2002

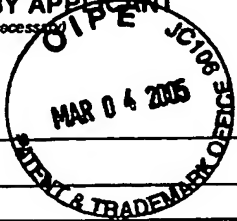
NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Name of author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		
MDP	MÉNARD, L., et al., <i>Synergistic Regulation of β_2-Adrenergic Receptor Sequestration: Intracellular Complement of β_2-Adrenergic Receptor Kinase and β-Arrestin Determine Kinetics of Internalization</i> , <i>Molecular Pharmacology</i> , Vol. 51, No. 5, May 1997, pp. 800-808, The American Society for Pharmacology and Experimental Therapeutics.		
↑	MHAOUTY-KODJA, S., et al., <i>Constitutively Active Alpha-1b Adrenergic Receptor Mutants Display Different Phosphorylation and Internalization Features</i> , <i>Molecular Pharmacology</i> , Vol. 55, No. 2, February 1999, pp. 339-347, The American Society for Pharmacology and Experimental Therapeutics.		
	OAKLEY, R.H., et al., <i>Association of β-Arrestin with G Protein-coupled Receptors during Clathrin-mediated Endocytosis Dictates the Profile of Receptor Resensitization</i> , <i>Journal of Biological Chemistry</i> , Vol 274, No. 45, November 5, 1999, pp. 32248-32257, The American Society for Biochemistry and Molecular Biology, Inc., USA.		
	OAKLEY, R.H., et al., <i>Differential Affinities of Visual Arrestin, β-Arrestin1, and β-Arrestin2 for G Protein-coupled Receptors Delineate Two Major Classes of Receptors</i> , <i>Journal of Biological Chemistry</i> , Vol 275, No. 22, June 2, 2000, pp. 17201-17210, The American Society for Biochemistry and Molecular Biology, Inc., USA.		
	OAKLEY, R.H., et al., <i>Molecular Determinants Underlying the Formation of Stable Intracellular G Protein-coupled Receptor - β-Arrestin Complexes after Receptor Endocytosis</i> , <i>Journal of Biological Chemistry</i> , Vol 276, No. 22, June 1, 2001, pp. 19452 - 19460, The American Society for Biochemistry and Molecular Biology, Inc., USA.		
	PROBST, W.C., et al., <i>Sequence Alignment of the G-Protein Coupled Receptor of Superfamily</i> , <i>DNA and Cell Biology</i> , Vol. 11, No. 1, January & February 1992, pp. 1-20, Mary Ann Liebert, Inc. Publishers.		
	SADEGHI, H.M., et al., <i>Maturation of Receptor Proteins in Eukaryotic Expression Systems</i> , <i>Journal of Receptor & Signal Transduction Research</i> , Vol. 17, No 1-3, 1997, pp. 433-445, Marcel Dekker, Inc., USA.		
	SADEGHI, H., et al., <i>O-Glycosylation of the V2 vasopressin receptor</i> , <i>Glycobiology</i> , Vol 9, No. 7, pp. 731-737, 1999, Oxford University Press, Printed by the Sheridan Press, USA.		
	SCHÖNEBERG, T., et al., <i>Functional rescue of mutant V2 vasopressin receptors causing nephrogenic diabetes insipidus by a co-expressed receptor polypeptide</i> , <i>Embo Journal</i> , Vol 15, No. 6, pp. 1283-1291, 1996, Oxford University Press.		
	SCHÖNEBERG, T., et al., <i>V2 Vasopressin Receptor Dysfunction in Nephrogenic Diabetes Insipidus Caused by Different Molecular Mechanisms</i> , <i>Human Mutation</i> , Vol 12, No. 3, pp. 196-205, 1998, Willey-Liss, Inc.		
	SHI, W., et al., <i>Rhodopsin Arginine-135 Mutants Are Phosphorylated by Rhodopsin Kinase and Bind Arrestin in the Absence of 11-cis-Retinal</i> , <i>Biochemistry</i> , Vol 37, pp. 4869-4874, 1998, American Chemical Society, Washington, D.C.		
↓	ZHANG, J., et al., <i>Cellular Trafficking of G Protein-coupled Receptor/ β-Arrestin Endocytic Complexes</i> , <i>Journal of Biological Chemistry</i> , Vol 274, No. 16, April 16, 1999, pp. 10999-11006, The American Society for Biochemistry and Molecular Biology, Inc., USA.		
MDP	ZHANG, J., et al., <i>A Central Role for β-Arrestins and Clathrin-coated Vesicle-mediated Endocytosis in β_2-Adrenergic Receptor Resensitization</i> , <i>Journal of Biological Chemistry</i> , Vol. 272, No. 43, October 24, 1997, pp. 27005-27014, The American Society for Biochemistry and Molecular Biology, Inc., USA.		
Examiner Signature	Michael PMK	Date Considered	8/15/05

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. SEND TO: Assistant Commissioner for Patents, Washington, D.C. 20231.

RECEIVED
JUL 23 2002
TECH CENTER 1600/2900

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)	Complete if Known	
	Application Number	10/054,616
	Filing Date	January 22, 2002
	First Named Inventor	BARAK, Larry S.
	Group Art Unit	1645 1646
	Examiner Name	Unknown
Sheet 1 of 1	Attorney Docket No: NRK.10022	



US PATENT DOCUMENTS			
Examiner Initial *	USP Document Number	Publication Date	Name of Patentee or Applicant of cited Document

FOREIGN PATENT DOCUMENTS				
Examiner Initials *	Foreign Document No	Publication Date	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Abstract, Translation, English Language Equivalent or Search Report

OTHER DOCUMENTS – NON PATENT LITERATURE DOCUMENTS		
Examiner Initials *	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Abstract, Translation, English Language Equivalent or Search Report
MDP	BIRNBAUMER, MARIEL, et al., "Molecular Cloning of the Receptor for Human Antidiuretic Hormone", Nature, vol. 357, no. 6376, pp. 333-335 (1992).	
MDP	ROSENTHAL, WALTER, et al., "Nephrogenic Diabetes Insipidus: A V2 Vasopressin Receptor Unable to Stimulate Adenylyl Cyclase", Journal of Biological Chemistry, vol. 268, no. 18, pp. 13030-13033 (1993).	
MDP	SIEGL, PETER K. S., et al., "In Vivo Pharmacology of L-158,809, a New Highly Potent and Selective Nonpeptide Angiotensin II Receptor Antagonist", Journal of Pharmacology and Experimental Therapeutics, vol. 262, no. 1, pp. 139-144 (1 July 1992).	

EXAMINER MICHAEL PAK

DATE CONSIDERED 8/15/05

